



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/075,500

02/14/2002

Mark Stephen Amshoff

PU010080

8797

24498

7590

02/05/2008

Joseph J. Laks

THOMSON LICENSING LLC

2 Independence Way, Patent Operations

PO BOX 5312

PRINCETON, NJ 08543

EXAMINER

RUSSELL, WANDA Z

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

02/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/075,500

Applicant(s)

AMSHOFF ET AL.

Examiner

Wanda Z. Russell

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-6, 8-13, and 15-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ovadia (Pub No. US 2002/0144286 A1), in view of Beser (U.S. Patent 6,212,563 B1).

For **claim 1**, Ovadia substantially teaches in a transmission system (Fig. 1) comprising a plurality of transmission channels ([0045], lines 2-3) wherein at least one of said plurality of channels carries a data signal (data, Title, and [0045], line 9) thereover, a channel search method (Title) for finding a data channel available (identifying data channels, [0014], line 2) for use by a terminal located at a downstream end (116-Fig. 1) of said plurality of transmission channels, said method comprising the steps of:

sequentially scanning (sweeps, [0047], line 1) at least two selected subsets (non-digital, [0045], lines 8-9, and data channel, [0047], line 5) of said plurality of channels ([0045], lines 2-3) for a channel having a data signal ([0047], 3rd line from the end, and [0045], line 9) transmitted at a predetermined modulation protocol (QAM, [0047], line 7); and

if the data channel scanned for in the preceding step is not found (not achieved, [0047], lines 5-6), further sequentially scanning (next QAM channel, [0047], line 7) at least one, but less than all (510 to 506 -Fig. 5, only data channel, not non-digital), of the selected subsets of the plurality of channels for a channel.

However, Ovadia fails to specifically teach having a data signal transmitted at other than said predetermined modulation protocol.

Beser teaches having a data signal transmitted at other than said predetermined modulation protocol (col. 6, lines 65-66).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine xxx et al. with xxx et al. to obtain the invention as specified, for different modulation protocols.

For **claim 2**, Ovadia and Beser teach everything claimed as applied above (see claim 1). In addition, Ovadia teaches the channel search method of claim 1 including the further step of:

sequentially scanning all of said plurality of channels for a channel having a data signal transmitted at said predetermined modulation protocol ([0047], lines 5-9).

For **claim 3**, Ovadia and Beser teach everything claimed as applied above (see claim 1). In addition, Ovadia teaches the channel search method of claim 1 wherein the first sequential scanning step is repeated at least once prior to beginning the step of scanning at least one of the selected subsets (506 and 510 -Fig. 5).

For **claim 4**, Ovadia and Beser teach everything claimed as applied above (see claim 1). However, Ovadia fails to specifically teach that the modulation protocol is 16 QAM.

Beser teaches that the modulation protocol is 16 QAM (col. 6, line 66).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ovadia with Beser to obtain the invention as specified, for different modulation protocols.

For **claim 5**, Ovadia and Beser teach everything claimed as applied above (see claim 1). However, Ovadia fails to specifically teach that the modulation protocol is 4 QAM.

Beser teaches that the modulation protocol is 4 QAM (col. 6, line 66).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ovadia with Beser to obtain the invention as specified, for different modulation protocols.

For **claim 6**, Ovadia and Beser teach everything claimed as applied above (see claim 1). In addition, Ovadia teaches the channel search method of claim 1 wherein data transmitted via said data channel available for use by said terminal is in accordance with the DOCSIS standard ([0025], line 8).

For **claim 8**, it is a bi-directional communication device (Fig. 2) and means for claim of claim 1, therefore it is rejected for the same reason above.

For **claims 9 -13**, they are corresponding to claims 2-6 respectively, therefore they are rejected for the same reason above.

For **claim 15**, Ovadia and Beser teach everything claimed as applied above (see claim 8). In addition, Ovadia teaches the bi-directional communication device of claim 8 wherein the bi-directional communication device is a modem ([0011], lines 1-2).

For **claim 16**, Ovadia and Beser teach everything claimed as applied above (see claim 8). In addition, Ovadia teaches the bidirectional communication device of claim 15 wherein the modem is a cable modem ([0011], lines 1-2).

For **claim 17**, it is a encoding with a known standard (QAM, [0047], line 7) claim of claim 1, therefore it is rejected for the same reason above.

For **claims 18 and 19**, they are corresponding to claims 4 and 5 respectively, therefore they are rejected for the same reason above.

3. **Claims 7 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ovadia (Pub No. US 2002/0144286 A1), in view of Beser (U.S. Patent 6,212,563 B1) and Van Beek (Pub No. US 2002/0083465 A1).

For **Claim 7**, Ovadia and Beser teach everything claimed as applied above (see claim 1). However, they fail to specifically teach the Euro-DOCSIS standard.

Van Beek teaches the Euro-DOCSIS standard ([0011], 2nd line from the end).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine xxx et al. with xxx et al. to obtain the invention as specified, for different standards.

For **claim 14**, it is corresponding to claims 7, therefore it is rejected for the same reason above.

Response to Amendment

4. Applicant's amendment filed December 7, 2007 has been received and considered.

Response to Arguments

5. Applicant's arguments, filed December 7, 2007, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

See more details above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZR

wzk



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600